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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 10/807,625  | 03/24/2004  | Krishna M. Ravi      | HES 2003-IP-009511U1 | 4052             |
| 28857   | 7590        | 06/21/2006           | EXAMINER             |                  |
| CRAIG W. RODDY<br>HALLIBURTON ENERGY SERVICES<br>P.O. BOX 1431<br>DUNCAN, OK 73536-0440 |             |                      | NEUDER, WILLIAM P    |                  |
|   |             |                      | ART UNIT             | PAPER NUMBER     |
|   |             |                      | 3672                 |                  |

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/807,625

Applicant(s)

RAVI, KRISHNA M.

Examiner

William P. Neuder

Art Unit

3672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,5-22,26-43 and 46-57 is/are pending in the application.
- 4a) Of the above claim(s) 12 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-11,13-22,26-32,34-43 and 46-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,4-11,13,22,26-32,34,43 and 46-50 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1,22 and 43 all state “ a stress absorbing material that is coated on the sleeve or that is embedded within the sleeve”. Coating and embedding are not equivalent structure and cannot be presented in alternative fashion. As to claim 46, this claim depends from canceled claim 44.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,5-9,14-20,22,26-32,35-51,43 and 46-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Gano 5,507346.

As to claims 1 and 14, Gano discloses (figs. 1-3) a method of casing a wellbore comprising providing a casing with a sleeve 26 of stress absorbent material coated thereon. Placing the coated casing into the well. As to claims 5,16,26,37,47 and 53,

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the coating 48 is on the interior surface. As to claims 7,17,28,38,49 and 55, the coating 38 is on the exterior surface. As to claims 8,18,29,39,50 and 56, there is no step of coating and the claim actually calls for a coated sleeve. How the coating is applied is not material. As to claims 9,19,30,40,51 and 57, the coating comprises fiber and resin (see col. 8, lines 41-45). As to claims 20,31,32 and 41, a casing collar 34 is connected to the end of the casing. The casing collar is a hollow cylindrically shaped housing. As to claims 22 and 35, Gano discloses a method of reducing transmission of stress from a casing to a cement sheath comprising providing a casing comprising a sleeve 26 having a stress absorbing coating (38,48), placing the casing in the wellbore 10 to form an annulus and placing cement 14 into the annulus and allowing the cement composition to set within the annulus to bond the casing to the formation (col. 8, line 2-4). As to claims 43,46 and 52, Gano discloses a casing comprising a sleeve 26 having a stress absorbing coating 38,48.

Claims 1,6,8,9,14,15,18,19,22,27,29,30,35,36,39,40,43,46,48,50-52,54,56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Bol 4,716,965.

As to claims 1 and 14, Bol discloses (fig. 1) a method of casing a well comprising providing a casing comprising a sleeve 1 having a stress absorbing coating 5, placing the casing into the well 2. As to claims 6,15,27,36,48 and 54, the coating 5 is on the exterior surface. As to claims 8,18,29,39,50 and 56, there is no method step of coating and the claim only calls for a coated casing. How the coating is applied is not material. The coating could be applied in any manner and still produce a coated casing. As to claims 9,19,30,40,51 and 57, the coating comprises a resin or elastomer (col. 2, lines

26-33). As to claims 22 and 35, Bol discloses a method of reducing transmission of stress from a casing to a cement sheath comprising providing a casing comprising a sleeve 1 having a stress absorbing coating 5, placing the casing in the wellbore 2 to form an annulus and placing cement 3 into the annulus and allowing the cement composition to set within the annulus to bond the casing to the formation (col. 2, lines 40-62). As to claims 43,46 and 52, Bol discloses a casing comprising a sleeve 1 having a stress absorbing coating 5.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5,16,26,37,47 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bol in view of Gano (both described above).

Bol does not disclose a coating on an interior surface. Gano teaches a coating on an interior surface to provide wear protection against contact from various tools

lowered into the casing (col. 9, lines 35-44). As it would be advantageous to have wear protection, it would have been obvious to modify the method and apparatus of Bol to have an interior coating in view of Gano's teaching that an interior coating prevents wear.

Claims 10, 11, 13, 21, 34 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gano (described above).

Gano discloses a casing collar 36 that hollow cylindrically shaped housing but does not disclose the coating being placed on the housing. Gano teaches that the coating 54 helps provide additional wear resistance (col. 10, lines 19-23). As it would be advantageous to have wear protection on the casing collar, it would have been obvious to modify Gano to have a coating on the surface of the casing collar.

### ***Response to Arguments***

Applicant's arguments filed 4/17/06 have been fully considered but they are not persuasive. Applicant argues that neither Gano nor Bol disclose a stress absorbing material that is coated on the sleeve. Applicant further states that the stress absorbing layers of Gano and Bol are both bonded to the casing sleeve and not coated. From Webster's dictionary, the definition of coated is to cover or spread with a finishing, protecting or enclosing layer. Clearly both stress absorbing layers in Gano and Bol cover the casing with a protecting or enclosing layer. The fact that the coated layer is bonded to the casing is not material in that a layer of stress absorbing material is still coated on the casing. With respect to the method claims, there is no step of coating, only a step of providing a coated casing.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Applicant's amendment necessitated the new 112 rejections.

This application contains claims 12 and 33 are drawn to an invention nonelected with traverse in Paper No. 4/17/06. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William P. Neuder whose telephone number is 571-272-7032. The examiner can normally be reached on Tuesday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
William P Neuder  
Primary Examiner  
Art Unit 3672

W.P.N.